

We claim:

1. The use of free-radically polymerized, UV-crosslinkable addition polymers which consist to the extent of at least 50% by weight of C₂ to C₁₈ alkyl (meth)acrylates as adhesives for the bonding of carriers coated with the polymer on substrates, wherein from 0.1 to 30% by weight of the monomers of which said polymer is composed are monomers A without carboxylic acid or carboxylic anhydride groups and with a water solubility of more than 5 g of monomers per liter of water and said substrates are moist substrates, especially refrigerated substrates.
- 15 2. The use as claimed in claim 1, wherein said polymer consists to the extent of from 50 to 99.85% by weight of C₂ to C₁₈ alkyl (meth)acrylates and to the extent of from 0.05 to 10% by weight of ethylenically unsaturated compounds having a photoinitiator group.
- 20 3. The use as claimed in claim 2, wherein the ethylenically unsaturated compound having a photoinitiator group is an acetophenone derivative or benzophenone derivative.
- 25 4. The use as claimed in any of claims 1 to 3, wherein said polymer has a K value of from 30 to 80, measured in 1% strength by weight solution of said polymer in tetrahydrofuran at 21°C.
- 30 5. The use as claimed in any of claims 1 to 4, wherein the glass transition temperature of said polymer is from -60 to +10°C.
6. The use as claimed in any of claims 1 to 5, wherein said monomers A comprise hydroxyalkyl (meth)acrylates, methyl (meth)acrylate, (meth)acrylonitrile or (meth)acrylamide.
- 35 7. The use as claimed in any of claims 1 to 6, wherein said polymer is applied as a melt.
- 40 8. The use as claimed in any of claims 1 to 7, wherein said polymers are applied to carriers, especially labels, adhesive tapes or sheets, subsequently crosslinked by high-energy radiation, especially UV light, and the resulting carriers coated with said polymer are bonded to moist substrates, especially refrigerated substrates.
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9. A method of applying carriers, especially labels, adhesive tapes or sheets, to moist substrates, especially refrigerated substrates, which comprises applying a polymer as set forth in any of claims 1 to 6 from the melt, as a solution or as an aqueous dispersion to said carriers, in the case of the solution or aqueous dispersion removing the solvent or the water, subsequently crosslinking said polymer by means of high-energy radiation, especially UV light, and bonding the resulting carriers coated with the polymer, to moist substrates, especially refrigerated substrates.

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